

## REPORT OF EXAMINER OF THE NORWICH GAS AND ELECTRIC PLANT

The Net Profits Have Steadily Increased--The Total Net Profits Amount to \$378,605.85--Profits for Last Nine Months, \$27,277.02--A Change Recommended in Manner of Keeping Departmental Accounts

To the Board of Commissioners  
of the Gas and Electrical Department,  
Norwich, Connecticut.

Gentlemen:—  
In accordance with your instructions I have made an examination of the books and records of the Gas and Electrical Department of Norwich, Connecticut, for the purpose of determining the Book Value of the plant at April 30, 1913, and the profits from operation from the period from July 1, 1904 to April 30, 1913, inclusive.  
Inasmuch as the books have been regularly audited each year, you decided that it would not be necessary for me to verify the correctness of the various books and accounts, and, therefore, I have taken the totals of the various accounts, as shown by the books, to be correct and I certify, only, that the various schedules and exhibits included in this report are in accordance with the books.  
It was at first proposed to have an appraisal of the whole property made, in order to arrive at the exact value of the Plant, but limitation on the time allowed me for the work made this impossible, and that part of the work had been postponed.  
I present herewith three Schedules and seven Exhibits as listed in the index.

## PROFIT FROM OPERATION.

The net profit for the period from July 1, 1904 to April 30, 1913, after deducting \$176,866.66 interest paid on the Bonds outstanding against the Plant, amounted to \$378,605.85 (exclusive of depreciation) as shown in Schedule A, Exhibit 1. This net profit for each of the nine periods was as follows:

Period Ending	Net Profit	Percentage of Gross Income
July 31, 1905 (13 months)	\$31,850.68	28.9
July 31, 1906	31,152.64	27.9
July 31, 1907	36,215.11	29.2
July 31, 1908	41,236.53	30.3
July 31, 1909	33,990.70	25.5
July 31, 1910	41,151.38	28.9
July 31, 1911	46,870.06	30.5
July 31, 1912	55,563.40	33.0
April 30, 1913 (9 months)	60,574.75	40.4

From the above statement it will be seen that there has been a steady increase in the net profits of the Plant from the beginning, with the exception of the year ending July 31, 1909, the decrease in net profits of that year being caused by a reduction in rates.

The excess of net profit for the 9 months ending April 30, 1913 over all charges for operating expense, depreciation and a return of 5 percent on the City's investment, amounts to \$27,277.02, as shown in Exhibit 4 of Schedule A. The rapid increase during the last three periods was caused by a very substantial increase in the volume of electrical business.

The total net profit for the nine periods (\$378,605.85) is accounted for as follows:

Expended for additions and improvements on plant	\$265,651.83
Less: Additional improvement by city	75,000.00
Total improvements paid for from earnings	\$190,651.83
Increase in inventory, etc., other than plant	17,766.87
Balance charged to City Treasurer, April 30, 1913	170,187.65

The balance charged to the City Treasurer at April 30, 1913 (\$170,187.65) after reimbursing the City for \$115,406.20 interest paid during the nine years on its \$227,000.00 Bonds issued to purchase the Plant and \$75,000.00 Notes issued to pay for additional is accounted for in Schedule C, Exhibit 1, which shows a balance on hand at May 15, 1913 with the City Treasurer, after paying all charges, both against the Plant and against the City for interest, of \$75,196.53.

## Profit and Loss Account From July 1, 1904 to April 30, 1913

	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.*	Total.
Net earnings from gas operation, Exhibit 2	\$22,770.50	\$18,013.66	\$17,846.61	\$18,534.90	\$15,320.08	\$18,073.24	\$23,718.39	\$23,924.36	\$18,318.74	\$175,420.58
Net earnings from electrical operations, Exhibit 3	\$1,642.47	\$3,179.74	\$7,551.91	\$2,445.82	\$8,344.36	\$2,755.41	\$4,417.00	\$1,062.47	\$7,155.84	\$37,855.02
Profit on merchandise, store room, bad debts, etc.	104.28	40.76	516.59	255.81	426.25	323.33	265.33	576.57	100.17	1,996.91
Net manufacturing profit	\$8,517.35	\$1,152.64	\$6,215.11	\$6,236.53	\$3,990.70	\$1,151.38	\$6,870.06	\$5,574.75	\$5,574.75	\$55,273.51
Deduct: Interest on bonds	21,566.67	20,900.00	20,900.00	20,900.00	19,999.99	19,999.99	20,000.00	20,000.00	15,000.00	\$176,666.66
Net operating profit exclusive of depreciation	\$1,850.68	\$3,152.64	\$3,215.11	\$4,286.53	\$3,990.70	\$4,151.38	\$6,870.06	\$5,563.40	\$6,574.75	\$378,605.85
1905, thirteen months.										
*Nine months only.										

## Gas and Electrical Plant of Norwich, Connecticut, Operating Account of Gas Plant July 1, 1904, to April 30, 1913

	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.*	Total.
Gross earnings	\$47,668.92	\$48,339.32	\$49,410.47	\$51,769.93	\$50,119.94	\$49,133.07	\$58,812.23	\$55,917.93	\$45,953.97	\$461,076.85
Deduct:										
Operating expenses, viz.—										
Manufacturing	21,197.18	25,232.86	24,415.12	25,244.40	26,164.53	20,684.28	21,141.95	21,435.38	19,482.87	208,999.57
Distribution	2,898.61	2,447.94	4,243.92	5,210.97	6,124.15	5,892.42	4,297.23	5,042.73	4,694.56	40,852.53
General expenses	1,902.53	2,644.36	2,904.82	2,779.66	3,611.13	4,533.73	4,454.66	4,915.51	3,457.50	30,804.20
Total operating expenses	25,998.32	30,325.16	31,563.86	33,235.03	34,899.86	31,110.43	29,938.84	31,098.57	27,635.23	275,656.30
Net earnings from operation carried to Exhibit 1	21,770.50	18,013.66	17,846.61	18,534.90	15,220.08	18,073.24	23,718.39	23,924.36	18,318.74	175,420.58
*Nine months to April 30, 1913.										

## Gas and Electrical Plant of Norwich, Connecticut, Operating Account of Electrical Plant July 1, 1904 to April 30, 1913

	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.*	Total.
Gross earnings	\$59,027.18	\$63,364.78	\$74,600.81	\$84,383.60	\$82,819.82	\$89,421.07	\$105,393.61	\$113,167.92	\$103,788.53	\$775,967.32
Deduct:										
Operating expenses, viz.—										
Manufacturing	21,493.34	22,526.86	27,879.33	29,327.47	30,831.34	33,342.94	49,190.06	47,677.49	36,330.44	298,599.27
Distribution	4,393.85	3,751.18	4,911.01	8,650.93	7,911.03	7,356.35	6,901.94	7,847.18	4,920.85	56,674.39
General expenses	1,497.52	3,907.00	3,958.56	3,959.38	5,733.09	5,966.37	5,884.61	6,560.80	5,371.40	42,338.73
Total operating expenses	27,384.71	30,185.04	36,748.90	41,937.78	44,475.46	46,655.66	61,976.61	62,105.45	46,622.69	398,112.30
Net earnings from operation carried to Exhibit 1	\$31,642.47	\$33,179.74	\$37,851.91	\$42,445.82	\$38,344.36	\$42,755.41	\$43,417.00	\$51,062.47	\$57,155.84	\$377,855.02

## Statement Showing Proper Charge For Depreciation and Necessary Return on City Investment in the Period From July 1, 1904 to April 30, 1913

Year ending July 31	City's Investment	Necessary Return	Book Value	Depreciation	Necessary Profit from Operation	Actual Profit from Operation	Excess or Deficiency
1905	\$353,378.18	\$17,668.91	\$627,000.00	\$31,350.00	\$49,018.91	\$31,850.68	\$17,168.23*
1906	339,000.00	16,950.00	605,000.00	30,259.16	47,219.16	31,152.64	16,066.52*
1907	339,000.00	16,950.00	633,553.75	31,677.91	48,827.91	36,215.11	12,612.80*
1908	339,000.00	16,950.00	628,811.28	31,430.66	48,390.56	41,236.53	7,154.03*
1909	339,000.00	16,950.00	617,510.07	30,876.50	47,825.50	33,990.70	13,834.80*
1910	339,000.00	16,950.00	599,518.65	29,976.93	46,925.93	41,151.38	5,774.55*
1911	339,000.00	15,100.00	584,797.30	29,232.89	44,339.89	46,870.06	2,536.17
1912	302,000.00	15,100.00	592,764.73	29,588.23	44,788.23	55,563.40	10,775.17
1913	302,000.00	11,325.00	592,606.34	21,972.73	33,297.73	60,574.75	27,277.02
Amount of depreciation charged			\$266,489.91	\$121,693.02	\$378,605.85		\$31,827.97
Additional amount to be charged				\$144,796.89			
For the nine months from August 1, 1913 to April 30, 1913.							
*Deficiency or loss.							
Section 1987 revised statute of 1902.							

## Schedule B.

## BALANCE SHEET.

April 30, 1913.

## ASSETS.

Book Value of Plant July 1, 1904	\$627,000.00
Add: Additions to Plant July 1, '04, to April 30, '13	\$265,651.83
Deduct: Depreciation at 5 per cent. per annum on Plant from July 1, '04, to April 30, '13	\$266,489.91
Book Value of Plant April 30, 1913	\$626,161.92
Inventory—Exhibit 1	13,262.87
Accounts Receivable—Exhibit 2	17,897.07
Boiler Insurance Unexpended	8.08

Cash at Office	75.00
Deposited with City Treasurer—Schedule C	170,187.65
	\$826,592.59

## LIABILITIES.

Investment of City of Norwich—Schedule C	\$302,000.00
Bonds outstanding against Plant	400,000.00
Interest Accrued on Bonds	6,666.66
Accounts Payable	5,064.09
Guarantee Deposits	727.50
Water Tax Accrued	18.40
Surplus or Profit, July 1, 1904, to April 1913, after deducting Bond Interest and Depreciation—Schedule A	112,115.94
	\$826,592.59

the balance shown on the Treasurer's books. I therefore recommend that the following Journal entries be made upon the books of the Plant in order to bring them into conformity with the books of the City Treasurer:

City Treasurer	\$112,000.00
To City's Investment (Cost of Equity)	\$112,000.00
To charge City Treasurer with amount received from City to pay for additions and improvements (1904-5).	
City's Investment (Cost of Equity)	\$87,000.00
To City Treasurer	\$37,000.00
To credit City Treasurer with amount repaid City to pay off notes (1910).	
Profit and Loss	\$4,197.33
To City Treasurer	\$4,197.33
To credit City Treasurer with items paid by Finance Dept. as follows:	
Loss on sub-lease of old office	\$1,235.17
Premiums on Surety Bonds	297.50
Damage Suit Settled	2,664.66
	\$4,197.33

City Treasurer	\$6,507.92
To Profit and Loss	\$6,507.92
To charge City Treasurer with interest received in Sinking and Reserve Funds.	
The amount of interest received on these Funds should be obtained from the City Treasurer each year and charged to him on the books of the Plant.	

I also recommend that the following Journal entries be entered upon the books of the Plant in order that they may accurately set forth the true condition of affairs of the Plant:

Plant Account	\$400,000.00
To Bonds Outstanding	\$400,000.00
To charge former account with that part of the cost of the Plant not entered upon the books at the time City took over the Plant.	
Profit and Loss	\$144,796.89
To Plant Account	\$144,796.89
To credit the latter account with the proper amount of depreciation as required by the Statutes.	

I wish to express my appreciation of the uniform courtesy shown me by the employees of the City, at both the office of the Plant and of the City Treasurer.

Respectfully submitted,  
(Signed) ARTHUR V. GRIMES,  
Certified Public Accountant.

## SCHEDULE "A"

## CONSOLIDATED PROFIT AND LOSS ACCOUNTS FOR THE PERIODS FROM JULY 1, 1904, TO APRIL 30, 1913.

Net profit from operation for the period, Exhibit 1	\$378,605.85
Deduct: Depreciation at 5 per cent per annum on value of plant, Exhibit 4	\$266,489.91
Profit for period—to balance sheet—Schedule B	\$112,115.94

## Schedule B.

## Exhibit 1.

## INVENTORY.

April 30, 1913.

Gas—	
Store Room	\$2,197.40
Gas Coal Stock	1,706.34
Coke	.16
Tar	189.26
Purification Supplies	264.78
Benchies	1,784.59
Gas Stove Mds.	197.95
Benzol	147.99
Gas Oil Stock	206.33
	\$7,269.75
Electrical—	
Store Room	\$2,289.85
Fuel Coal	2,646.66
Lubricating Oil	76.64
	\$5,013.15
Deduct: Excess Credit on Tar Barrels	\$12,334.43
	\$12,334.43

## Schedule B.

## Exhibit 2.

## ACCOUNTS RECEIVABLE.

April 30, 1913.

Gas—	
General Consumer	\$5,644.23
Prepayment	48.53
City Public Buildings	4.10
	\$5,696.86
Electrical—	
Light Sales	\$5,962.67
Power Sales	3,567.91
City Public Buildings	56.34
Street Lights	1,818.36
	\$10,605.28
Sundry Sales Charged	2,195.09
	\$17,997.23

## Schedule C.

## Exhibit 1.

## ACCOUNT WITH CITY TREASURER

For the Period from July 1, 1904, to April 30, 1913.

DEBIT.	
Received from City to Purchase Plant	\$227,000.00
Received from City for Additions to Plant	112,000.00
Received from City for Running Expenses—1st year	14,278.18
Total Received from City	\$353,278.18

Deduct:	
Repaid City, 1904	\$14,376.19
Repaid City, 1910	37,000.00
	\$51,376.19

City's Investment, April 30, 1913	\$302,000.00
Add:	
Net Profit from Operation for Period, exclusive of Depreciation Charges, Schedule A	\$378,605.85
Total Credits	\$680,605.85

## CREDIT.

Paid on Plant, July 1, 1904	\$227,000.00
Expended for Additions and Improvements on Commissioners' Orders	265,651.83
Expended for Mds. and Other Assets on Hand April 30, 1913	17,766.37
Total Credits	\$510,418.20

Balance charged to City Treasurer April 30, 1913, Exh. 1.... 170,187.65

## Schedule C.

## Exhibit 1.

## CASH ACCOUNT OF CITY TREASURER.

May 15, 1913.	\$680,605.85
Charged City Treasurer per Schedule C	\$170,187.65
Add: Interest Received from Sinking and Reserve Funds	6,807.92
Receipts May 1 to 15, 1913	15,904.48
	\$192,800.05

Deduct: Amounts expended for Gas and Electrical Dept. not entered on the books, viz.:	
Loss on sub-lease of old Office	\$1,235.17
Premiums paid on Surety Bonds	297.50
Damage Suit Settled	2,664.66
Interest paid on Bonds and Notes issued by City to pay for Plant and Additions	112,406.20
	\$116,603.53

Net Balance as per City Treasurer's Books..... \$76,196.53